

ADS-85

5/3/88
FED/FSB

MEMORANDUM FOR THE RECORD

FROM:

25X1

SUBJECT: TVRO Recent Hardware and Software Problems and Assessment of Current Remote System

I received a call from a Mr. Dick Klimsch, David Sarnoff Laboratory asking for an in-depth explanation of the present TVRO remote design and the problems it was currently experiencing. He was given an in-depth explanation of the design and an update on the current status of problems, being experienced on the TVRO hardware and software. The current status was obtained from ST Research and included a listing of the problems and what had been done and was to be done in resolving them. Mr. Klimsch said that he was asked to come and make an assessment on the capability of the TVRO system, but that based on what I had told him, he did not think now was the right time to do it. He said that the problems already identified and what had been done, and was to be done to solve them seemed reasonable solutions to correct the hardware and software deficiencies. These problems should all have been corrected in 2 - 3 weeks from now. In any case, Mr. Klimsch said that if he were to make an assessment, he would rather do it when the system was up and running with all problems resolved and not try to assess the system when it is under repair. Since ST Research is making an effort to correct the identified problems, I agreed with Mr. Klimsch that it would be better to wait until the present problems were corrected and suggested he wait about a month before coming.

With the exception of the software glitches and Carbon Copy Communications Program crashing, the TVRO remote system hardware was stable from the time of installation in late December, 1987 until approximately 3 weeks ago when some hardware problems started occurring.

A serious technical mistake was made by ST Research in trying to identify, analyze and isolate noise stemming from a poor circuit ground design. The power supply ground was tied to chassis ground. On their own, ST Research removed the power supply ground from chassis ground causing a floating ground condition. This caused several IC's to fail over a period of a week and a half. The ground was recently re-attached and since then the hardware problems have been settling down. A new spare MUX card is being built and will be installed in place of a defective one which will be repaired and held in stock as a spare. ST Research is also working on modifications to remove signal ground from chassis ground as any properly designed circuit should. As stated above, there are several problems remaining to be corrected, and as they are, we will keep all concerned advised.

cc: C/ESG, C/OPS, C/FED, C/HED, C/MOD, C/TVC, C/EB